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Docket No. UF-281D2  
Serial No. 10/625,825In the Claims

Claim 1 (Original): An article of manufacture useful in treating a neurological condition characterized by overactivation of an ionotropic glutamatergic receptor, said article containing a pharmaceutical composition comprising an aromatic amino acid, isomer, or analog thereof, and a pharmaceutically acceptable carrier or diluent.

Claim 2 (Original): The article of manufacture, according to claim 1, wherein said article is an intravenous bag.

Claim 3 (Original): The article of manufacture, according to claim 1, wherein said article is selected from the group consisting of a syringe, a nasal applicator, and a microdialysis probe.

Claim 4 (Original): The article of manufacture, according to claim 1, wherein said article further comprises printed materials disclosing instructions for the parenteral treatment of the neurological condition.

Claim 5 (Original): The article of manufacture, according to claim 4, wherein the printed material is embossed or imprinted on the article of manufacture and indicates the amount or concentration of aromatic amino acid, isomer, or analog thereof, recommended doses for parenteral treatment of the neurological condition, or recommended weights of patients to be treated.

Claim 6 (Original): The article of manufacture, according to claim 1, wherein said pharmaceutical composition further comprises a facilitating substance that increases transport of said aromatic amino acid, isomer, or analog, across the blood-brain barrier.

Claim 7 (Original): The article of manufacture, according to claim 6, wherein said facilitating substance is an allosteric enhancer.

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Claim 8 (Original): The article of manufacture, according to claim 1, wherein said aromatic amino acid is selected from the group consisting of L-tyrosine, L-tryptophan, and L-phenylalanine.

Claim 9 (Original): The article of manufacture, according to claim 1, wherein said pharmaceutical composition comprises a mixture of said aromatic amino acids selected from the group consisting of: L-tyrosine and L-tryptophan; L-tyrosine and L-phenylalanine; L-tryptophan and L-phenylalanine; and L-tyrosine, L-tryptophan, and L-phenylalanine.

Claim 10 (Original): The article of manufacture, according to claim 1, wherein said aromatic amino acid isomer is an enantiomer selected from the group consisting of D-tyrosine, D-tryptophan, and D-phenylalanine.

Claim 11 (Original): The article of manufacture, according to claim 1, wherein said pharmaceutical composition comprises a mixture of said aromatic amino acid isomers selected from the group consisting of: D-tyrosine and D-tryptophan; D-tyrosine and D-phenylalanine; D-tryptophan and D-phenylalanine; and D-tyrosine, D-tryptophan, and D-phenylalanine.

Claim 12 (Original): The article of manufacture, according to claim 1, wherein said pharmaceutical composition comprises a mixture of aromatic amino acids and enantiomers thereof consisting of a dextrorotatory amino acid and a levorotatory amino acid.

Claim 13 (Original): The article of manufacture, according to claim 1, wherein said aromatic amino acid is a mixture of L-phenylalanine and D-phenylalanine.

Claim 14 (Original): A method for treating a neurological condition characterized by excessive activation of glutamatergic ionotropic receptors comprising parenterally administering at least one aromatic amino acid, isomer, or analog thereof, to a patient in need of such treatment.

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Claim 15 (Original): The method, according to claim 14, wherein the neurological condition is selected from the group consisting of anoxic damage, hypoxic damage, traumatic brain injury, spinal cord injury, local anesthetic-induced seizure activity, ischemic stroke, ischemic neurodegeneration of the retina, epilepticus, Tourette's syndrome, obsessive-compulsive disorder, drug-induced CNS injury, chronic pain syndromes, lateral sclerosis, Alzheimer's disease, Huntington's chorea, AIDS dementia syndrome, and cocaine addiction, or combinations thereof.

Claim 16 (Original): The method, according to claim 14, wherein the patient is suffering from the neurological condition.

Claim 17 (Original): The method, according to claim 14, wherein the aromatic amino acid, isomer, or analog thereof, is administered to the patient intravenously.

Claim 18 (Original): The method, according to claim 14, wherein the aromatic amino acid, isomer, or analog thereof, is administered to the patient intra-nasally.

Claim 19 (Original): The method, according to claim 14, wherein the aromatic amino acid, isomer, or analog thereof, is administered in an amount sufficient to raise the concentration of the aromatic amino acid, isomer, or analog to above a physiologically normal level.

Claim 20 (Original): The method, according to claim 14, wherein the aromatic amino acid, isomer, or analog thereof, is administered in an amount sufficient to raise the patient's blood plasma level of the aromatic amino acid, isomer, or analog, to within a range of about 200  $\mu$ M to about 2000  $\mu$ M.

Claim 21 (Original): The method, according to claim 14, wherein the aromatic amino acid, isomer, or analog thereof, is administered in an amount sufficient to raise the patient's blood plasma level of the aromatic amino acid, isomer, or analog, to within a range of about 300  $\mu$ M to about 1800  $\mu$ M.

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Claim 22 (Original): The method, according to claim 14, wherein the aromatic amino acid, isomer, or analog thereof, is administered in an amount sufficient to raise the patient's blood plasma level of the aromatic amino acid, isomer, or analog, to within a range of about 800  $\mu$ M to about 1500  $\mu$ M.

Claim 23 (Original): The method, according to claim 14, wherein said aromatic amino acid is selected from the group consisting of L-tyrosine, L-tryptophan, and L-phenylalanine.

Claim 24 (Original): The method, according to claim 14, wherein a mixture of said aromatic amino acids are administered, and wherein said mixture is selected from the group consisting of: L-tyrosine and L-tryptophan; L-tyrosine and L-phenylalanine; L-tryptophan and L-phenylalanine; and L-tyrosine, L-tryptophan, and L-phenylalanine.

Claim 25 (Original): The method, according to claim 14, wherein said aromatic amino acid isomer is an enantiomer selected from the group consisting of D-tyrosine, D-tryptophan, and D-phenylalanine.

Claim 26 (Original): The method, according to claim 14, wherein a mixture of said aromatic amino acid isomers are administered, and wherein said mixture is selected from the group consisting of: D-tyrosine and D-tryptophan; D-tyrosine and D-phenylalanine; D-tryptophan and D-phenylalanine; and D-tyrosine, D-tryptophan, and D-phenylalanine.

Claim 27 (Original): The method, according to claim 14, wherein a mixture of said aromatic amino acid and said isomer is administered, wherein said mixture comprises a levorotatory aromatic amino acid and a dextrorotatory aromatic amino acid.

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Claim 28 (Original): The method, according to claim 14, wherein a mixture of said aromatic amino acid and said isomer is administered, and said mixture comprises L-phenylalanine and D-phenylalanine.

Claim 29 (Original): The method, according to claim 14, wherein said aromatic amino acid, isomer, or analog is co-administered with a facilitating substance that increases transport of said aromatic amino acid, isomer, or analog across the blood-brain barrier.

Claim 30 (Original): The method, according to claim 29, wherein said facilitating substance is an allosteric enhancer.

Claim 31 (New): A method for lowering glutamate concentration in the synaptic cleft of a patient, wherein said method comprises administering an effective amount of at least one aromatic amino acid, isomer, or analog thereof, to the patient.

Claim 32 (New): The method of claim 31, wherein the at least one amino acid, isomer, or analog thereof inhibits ionotropic glutamate receptor-mediated synaptic transmission.

Claim 33 (New): The method of claim 31, wherein the patient is suffering from anoxic or hypoxic damage.

Claim 34 (New): The method of claim 31, wherein said administering is carried out parenterally.

Claim 35 (New): A pharmaceutical composition comprising an aromatic amino acid, isomer, or analog thereof, and a pharmaceutically acceptable carrier or diluent.

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